

THE MINISTER OF POWER (SHRI SUSHIL KUMAR SHINDE): (a) and (b) Yes, Sir. BHEL's on-going expansion plans aim at increasing its annual capacity from present 6000 MW to 10000 MW per year.

(c) Under Rajiv Gandhi Grameen Vidyutikaran Yojana, Rural Electrification Corporation has received 22 proposals from Orissa Government, of which 3 projects for Jajpur, Nayagarh and Angul districts in Orissa have been sanctioned at a cost of Rs. 409.77 crore. Further, 5 projects for Ganjam, Gajapati, Bhadrak, Balasore and Puri districts have been given "in principle" approval at a cost of Rs. 546.02 crore.

### **Implementation of power reforms**

2816. SHRI C. RAMACHANDRAIAH: Will the Minister of POWER be pleased to state:

(a) the details of the States that have effectively been implementing power reforms in the country particularly in Andhra Pradesh;

(b) the transmission and distribution losses in the States which have been effectively implementing power reforms in the country;

(c) whether it is a fact that in spite of reforms T&D losses have not come down; and

(d) if so, the steps his Ministry is taking to reduce T&D losses?

THE MINISTER OF POWER (SHRI SUSHIL KUMAR SHINDE): (a) The focus on Power Sector Reforms started in 2001 *inter alia* including setting up of State Electricity Regulatory Commissions (SERCs), rationalization of tariffs, restructuring/unbundling of State Electricity Boards (SEBs), feeder and consumer metering. A statement showing the status of Power Sector Reforms in the States is at Statement-I (See below).

Andhra Pradesh has restructured its power sector. It has formed one generating company, one transmission company and four distribution companies. SERC was constituted in 1999 and has issued seven tariff orders in the direction of rationalization of electricity tariff. The State has also set up special courts and police stations for controlling electricity theft.

(b) As per report prepared by Power Finance Corporation, the details for Aggregate Technical and Commercial (AT&C) losses of the State power distribution utilities are at Statement II (See below).

(c) The adoption of reform measures by the States and power utilities has helped them in improving their performance. This has resulted in better accountability, increase in efficiency and focus on improvement in Key Performance Indicators (KPIs). The billing efficiency at national level has improved from 67.25% during 2001-02 to 69.87% during 2004-05. The national average collection efficiency has also improved from 90.91 % during 2001-02 to 94.72% during 2004-05. Due to this improvement in billing and collection efficiency, the national average AT&C losses of the distribution companies reduced from 38.86% in 2001-02 to 33.82% in 2004-05.

(d) Government has already started taking measures to reduce AT&C losses. These are:

**(a) Technical Measures**

- \* Installation of efficient meters
- Upgradation and strengthening of the weak distribution system
- \* Relocation of distribution sub-stations and/or provision of additional distribution sub-stations
- \* Installation of lower capacity distribution transformers to serve a smaller number/cluster of consumers and substitution of distribution transformers with those having lower no-load losses
- \* Installation of shunt capacitors
- \* Adoption of High Voltage Distribution System (HVDS)
- Regular maintenance of distribution network
- \* GIS mapping of sub transmission and distribution network including compilation of data
- \* IT intervention

**(b) Commercial Measures**

- \* Improvement in metering and billing

Improvement in revenue collection

Energy accounting and auditing

**(c) Management Measures**

- \* Adoption of energy accounting and auditing
- \* Proper network planning for future expansion

Preparation of long-term plans on regular basis for phased strengthening and improvement of the distribution systems along with associated transmission system

- \* Training of employees

**(d) Policy Measures**

- \* Adoption of vigilance and legal measures in accordance with Electricity Act, 2003, setting up of special courts, police stations, etc.
- \* Implementation of the Accelerated Power Development and Reforms Programme (APDRP) for upgradation and strengthening of sub-transmission and distribution system and providing incentive for reducing cash losses by SEBs/Utilities

***Statement-I***

*Status of Power Sector Reforms with States*

| SI No | Name of State     | Restructuring/<br>Unbundling of<br>SEBs | Constitution<br>of SERC | Issue of<br>tariff<br>order by<br>SERC | 11 kV<br>Feeder<br>Metering<br>(%) | Consumer<br>Metering<br>(%) |
|-------|-------------------|---|-------------------------|--|------------------------------------|-----------------------------|
| 1     | 2                 | 3                                       | 4                       | 5                                      | 6                                  | 7                           |
| 1     | Andhra Pradesh    | Yes                                     | Yes                     | Yes                                    | 94                                 | 96                          |
| 2     | Arunachal Pradesh | —                                       | —                       | —                                      | 0                                  | 46                          |
| 3     | Assam             | Yes                                     | Yes                     | Yes                                    | 100                                | 95                          |
| 4     | Bihar             | —                                       | Yes                     | Yes                                    | 41                                 | 50                          |
| 5     | Chhattisgarh      | —                                       | Yes                     | Yes                                    | 100                                | 69                          |

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| 1      | 2                | 3   | 4   | 5   | 6   | 7   |
|--------|------------------|-----|-----|-----|-----|-----|
| 6      | Delhi            | Yes | Yes | Yes | 100 | 100 |
| 7      | Goa              | —   | Yes | —   | 100 | 97  |
| 8      | Gujarat          | Yes | Yes | Yes | 100 | 93  |
| 9      | Haryana          | Yes | Yes | Yes | 100 | 92  |
| 10     | Himachal Pradesh | —   | Yes | Yes | 97  | 100 |
| 11-    | Jammu & Kashmir  | —   | Yes | —   | 95  | 40  |
| 12"    | Jharkhand        | —   | Yes | Yes | 86  | 75  |
| 13     | Karnataka        | Yes | Yes | Yes | 100 | 82  |
| 14     | Kerala           | —   | Yes | Yes | 100 | 100 |
| 15     | Madhya Pradesh   | Yes | Yes | Yes | 100 | 72  |
| 16     | Maharashtra      | Yes | Yes | Yes | 100 | 87  |
| 17     | Manipur          | —   | Yes | —   | 21  | 82  |
| 18     | Meghalaya        | —   | Yes | —   | 100 | 50  |
| 19     | Mizoram          | —   | Yes | —   | 72  | 99  |
| 20     | Nagaland         | —   | —   | —   | 85  | 61  |
| 21     | Orissa           | Yes | Yes | Yes | 95  | 81  |
| 22     | Punjab           | —   | Yes | Yes | 100 | 85  |
| 23     | Rajasthan        | Yes | Yes | Yes | 100 | 94  |
| 24     | Sikkim           | —   | Yes | —   | 100 | 92  |
| 25     | Tamil Nadu       | —   | Yes | Yes | 100 | 87  |
| 26     | Tripura          | Yes | Yes | Yes | 100 | 81  |
| 27     | Uttar Pradesh    | Yes | Yes | Yes | 100 | 91  |
| 28     | Uttaranchal      | Yes | Yes | Yes | 100 | 95  |
| 29     | West Bengal      | —   | Yes | Yes | 100 | 99  |
| TOTAL: |                  | 13  | 27  | 21  | 96  | 93  |

**Statement-II***AT&C Loss of State Distribution Utilities (%)*

| Sl.No. | State                    | 2004-05 . |
|--------|--------------------------|-----------|
| 1      | Andhra Pradesh           |           |
|        | APCPDCL                  | 23.96     |
|        | APEPDCL                  | 14.27     |
|        | APNPDCL                  | 21.91     |
|        | APSPDCL                  | 20.55     |
| 2      | Arunachal Pradesh        | 37.30     |
| 3      | Assam                    | 39.31     |
| 4      | Bihar                    | 74.10     |
| 5      | Chhattisgarh             | 29.97     |
| 6      | Delhi                    | 41.98     |
|        | BRPL BYPL                | 51.70     |
|        | NDPL                     | 32.92     |
| 7      | Goa                      | 17.27     |
| 8      | Gujarat                  | 30.32     |
| 9      | Haryana                  | 36.39     |
|        | Dakshin HBVNL Uttar      | 43.12     |
|        | HBVNL                    |           |
| 10     | Himachal Pradesh         | 21.71     |
| 11     | Jammu & Kashmir          | 68.33     |
| 12     | Jharkhand                | 69.24     |
| 13     | Karnataka                | 24.83     |
|        | Bangalore ESCOM Gulbarga | 42.99     |
|        | ESCOM Hubli ESCOM        | 41.65     |
|        | Mangalore ESCOM          | 26.63     |

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| Sl.No. | State          | 2004-05 |
|--------|----------------|---------|
| 14     | Kerala         | 32.12   |
| 15     | Madhya Pradesh | 52.79   |
| 16     | Maharashtra    | 26.62   |
| 17     | Manipur        | 88.56   |
| 18     | Meghalaya      | 38.12   |
| 19     | Mizoram        | 22.02   |
| 20     | Nagaland       | 39.35   |
| 21     | Orissa         | 75.99   |
|        | CESCO          | 40.42   |
|        | NESCO          | 35.65   |
|        | SOUTHCO        | 35.89   |
|        | WESCO          |         |
| 22     | Punjab         | 24.02   |
| 23     | Rajasthan      |         |
|        | AjmerWNL       | 49.76   |
|        | Jodhpur WNL    | 47.57   |
|        | Jaipur WNL     | 43.22   |
| 24     | Sikkim         | 63.60   |
| 25     | Tamil Nadu     | 18.82   |
| 26     | Tripura        | 30.88   |
| 27     | Uttar Pradesh  |         |
|        | Dakshin WNL    | 58.02   |
|        | Madhya WNL     | 42.48   |
|        | Paschimi WNL   | 32.40   |
|        | Poorvi WNL     | 56.72   |
| 28     | Uttaranchal    | 42.86   |
| 29     | West Bengal    | 23.91   |
| TOTAL  |                | 33.82   |